IN THE CLAIMS:

Please cancel Claims 2-4, 7, 9, 16, 18-20, 23, 25, 34, and 42-53, without prejudice or disclaimer of subject matter. Please amend Claims 1, 5, 6, 8, 10-15, 17, 21, 22, 24, 26-33, 35-41, and 54-56, and add new Claims 57-60. The following is a complete listing of claims and replaces all prior versions and listings of claims in the present application:

Claim 1 (currently amended): Communication method of communicating digital information of different data formats via a plurality of communication channels shared between several communication [[means]] units, wherein the method comprises:

- a reception operation of receiving digital information having a first format, transmitted via a first communication channel from a communication [[means]] unit that uses the first format;

- a determination operation of determining at least a need to reformat received digital information having the first format according to at least one characteristic of the plurality of communication channels for communicating between the several communication units;

- a reformat operation of reformatting the received digital information having the first format to digital information having a second format different from the first format, if ~~resources to use a second channel for transmission of digital information having the second format are available~~ a need is determined; and

- a transmission operation of transmitting the digital information having the second format via [[the]] a second channel, wherein the digital information having the second

format and transmitted via the second channel is received by a communication [[means]] unit that uses the second format.

Claims 2-4 (canceled)

Claim 5 (currently amended): Communication method according to Claim [[3]] 1, characterised in that the determination operation takes into account a transmission channel identifier used during transmission of the digital information via the first communication channel.

Claim 6 (currently amended): Communication method according to Claim [[3]] 1, characterised in that the determination operation takes into account a bandwidth to be used during the transmission operation.

Claim 7 (canceled)

Claim 8 (currently amended): Communication method according to ~~any one of Claims 1 and 2~~ Claim 1, characterised in that the method further comprises a stoppage operation of stopping reformatting such that following the stoppage operation the reformat operation is no longer performed on the received digital data having the first format.

Claim 9 (canceled)

Claim 10 (currently amended): Communication method according to ~~any one of Claims 1 and 2~~ Claim 1, characterised in that the first communication channel and the second communication channel are merged.

Claim 11 (currently amended): Communication method according to ~~any one of Claims 1 and 2~~ Claim 1, characterised in that the first communication channel and the second communication channel are not merged.

Claim 12 (currently amended): Communication method according to Claim [[3]] 1, characterised in that the method further comprises an isolation operation of isolating flows between two buses.

Claim 13 (currently amended): Communication method according to ~~any one of Claims 1 and 2~~ Claim 1, characterised in that

if the digital information having the first format is transmitted in an isochronous mode, the digital information having the second format is transmitted in an asynchronous mode, and

if the digital information having the first format is transmitted in the asynchronous mode, the digital information having the second formation is transmitted in the

isochronous mode.

Claim 14 (currently amended): Communication method according to ~~any one of Claims 1 and 2~~ Claim 1, characterised in that the method further comprises a transmission resource allocation operation of allocating a transmission resource for at least one transmission operation.

Claim 15 (currently amended): Communication method according to Claim [[14]] 1, characterised in that the method further comprises a bandwidth reservation operation of reserving a bandwidth for at least one transmission operation.

Claim 16 (canceled)

Claim 17 (currently amended): Device for communicating digital information of different data formats via a plurality of communication channels between several communication [[means]] units, wherein the device comprises communication [[means]] unit that:

- includes [[means]] a receiver for receiving digital information having a first format transmitted via a first communication channel from a communication [[means]] unit that uses the first format,

- including a determination unit for determining at least a need to reformat

received digital information having the first format according to at least one characteristic of the plurality of communication channels for communicating between the several communication units,

- includes [[means]] a reformat unit for reformatting the received digital information having the first format to digital information having a second format different from the first format, if ~~resources to use a second channel for transmission of digital information having the second format are available~~ a need is determined, and

- is adapted to perform a transmission operation to transmit the digital information having the second format, via [[the]] a second channel, wherein the digital information having the second format and transmitted via the second channel is received by another communication [[means]] unit, which uses the second format.

Claims 18-20 (canceled)

Claim 21 (currently amended): Communication device according to Claim [[19]] 17, characterised in that the determination [[means]] unit is adapted to take into account a transmission channel identifier used during transmission of the digital information via the first communication channel.

Claim 22 (currently amended): Communication device according to Claim [[19]] 17, characterised in that the determination [[means]] unit is adapted to take into account a

bandwidth to be used during the transmission operation.

Claim 23 (canceled)

Claim 24 (currently amended): Communication device according to ~~any one of Claims 17 and 18~~ Claim 17, characterised in that the device further comprises a reformatting stoppage [[means]] unit adapted to stop a reformatting operation such that after stopping [[a]] the reformatting operation the communication [[means]] unit transmits no further information having the second format.

Claim 25 (canceled)

Claim 26 (currently amended): Communication device according to ~~any one of Claims 17 and 18~~ Claim 17, characterised in that each communication channel conforms with an IEEE 1394 standard.

Claim 27 (currently amended): Communication device according to ~~any one of Claims 17 and 18~~ Claim 17, characterised in that the first communication channel and the second communication channel are merged.

Claim 28 (currently amended): Communication device according to ~~any one of~~

~~Claims 17 and 18~~ Claim 17, characterised in that the first communication channel and the second communication channel are not merged.

Claim 29 (currently amended): Communication device according to Claim [[28]] 17, characterised in that the device further comprises an interbus bridge that conforms with an IEEE 1394.1 standard.

Claim 30 (currently amended): Communication device according to Claim [[28]] 17, characterised in that the communication [[means]] unit is adapted to isolate flows between the first and second communication channels and to cause peripherals connected to the first and second communication channels to communicate.

Claim 31 (currently amended): Communication device according to ~~any one of Claims 17 and 18~~ Claim 17, characterised in that the communication [[means]] unit is adapted to perform operations of transmission and reception in an isochronous mode and in an asynchronous mode.

Claim 32 (currently amended): Communication device according to ~~any one of Claims 17 and 18~~ Claim 17, characterised in that the device further comprises a transmission resources allocation [[means]] unit adapted to allocate transmission resources for at least one transmission operation.

Claim 33 (currently amended): Communication device according to Claim ~~32~~ 17, further comprising a bandwidth reservation ~~means for reserving~~ unit adapted to reserve a bandwidth for at least one ~~information~~ transmission operation.

Claim 34 (canceled)

Claim 35 (currently amended): Communication device according to ~~any one of Claims 17 and 18~~ Claim 17, characterised in that the communication [[means]] unit is adapted to process, in parallel, at least two information flows.

Claim 36 (currently amended): Communication device according to ~~any one of Claims 17 and 18~~ Claim 17, characterised in that the communication [[means]] unit is adapted to process flows bidirectionally.

Claim 37 (currently amended): Communication device according to ~~any one of Claims 17 and 18~~ Claim 17, characterised in that the communication [[means]] unit is adapted so that one of the first and second formats complies with a "DIGITAL VIDEO" standard.

Claim 38 (currently amended): Communication device according to ~~any one of Claims 17 and 18~~ Claim 17, characterised in that the communication [[means]] unit is adapted so that one of the first and second formats complies with a "JPEG 2000" standard.

Claim 39 (currently amended): Communication device according to ~~any one of Claims 17 and 18~~ Claim 17, characterised in that the communication [[means]] unit is adapted so that one of the first and second formats complies with a "MPEG2" standard.

Claim 40 (currently amended): Network, characterised in that the network comprises a communication device according to ~~any one of Claims 17 and 18~~ Claim 17.

Claim 41 (currently amended): Computer, characterised in that the computer comprises a communication device according to ~~any one of Claims 17 and 18~~ Claim 17.

Claims 42-53 (canceled)

Claim 54 (currently amended): Information storage device, which is readable by a computer or a microprocessor storing instructions of a computer program, characterized in that the information storage device allows implementation of the communication method according to ~~any one of Claims 1 and 2~~ Claim 1.

Claim 55 (currently amended): Information storage device, which is removable, partially or completely, and is readable by a computer or a microprocessor storing instructions of a computer program, characterized in that the information storage device allows implementation of the communication method according to ~~any one of Claims 1 and 2~~ Claim 1.

Claim 56 (currently amended): Computer program product embodying a computer program for implementing the communication method according to ~~any one of Claims 1 and 2~~ Claim 1.

Claim 57 (new): Communication method according to Claim 1, wherein the determination operation takes into account a need to encrypt the digital information during the transmission operation.

Claim 58 (new): Communication device according to Claim 57, wherein the reformat operation is an encryption operation of encrypting the digital information having the first format in order to form the digital information having the second format.

Claim 59 (new): Communication device according to Claim 17, wherein the determination unit is adapted to take into account a need to encrypt the digital information during transmission.

Claim 60 (new): Communication device according to Claim 59, wherein the reformat unit comprises an encryption unit adapted to encrypt the digital information having the first format in order to form the digital information having the second format.